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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PATEL, NATASHA

ART UNIT	PAPER NUMBER
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3766

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,006

Applicant(s)

PHILLIPS ET AL.

Examiner

Natasha N. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 18-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-17, drawn to a medical device programmer, classified in class 607, subclass 36.
 - II. Claims 18-34, drawn to a method of manufacturing the programmer, classified in class 607, subclass 36.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, Invention I can be made by a process other than the one specifically disclosed by Invention II.
4. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Steven Shumaker on 3/22/06 a provisional election was made without traverse to prosecute the invention of the medical device programmer with faceplate, claims 1-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-34 withdrawn from further

consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 8-11, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al. (US Patent 6,804,558) in view of Lin et al. ("A Wireless PDA-Based Physiological Monitoring System for Patient Transport," IEEE Transactions on Information Technology In Biomedicine, 439-447 (Aug. 29, 2003)).

8. Regarding Claim 1, Haller discloses a medical device programmer comprising a first housing member, a second housing member (see element 110, Figure 6A), a display (see col. 31, lines 6-8) and a plate member attached to the second housing member (see col. 31, lines 8-13), wherein the plate member covers at least a portion of the display and includes a transparent area that exposes the display for viewing (see element 110, Figure 6A). The examiner considers that the first housing member is the back portion of programmer 110, the second housing member is the front portion of programmer 110, and both housing members enclose the components of the programmer. Furthermore, the examiner considers since the display is visible with the faceplate in place (see element 110, Figure 6A), there is a transparent area in the

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faceplate that allows for this. Haller discloses a custom faceplate (see col. 31, line 13), but he does not disclose that the plate member is printed with information to identify a programmer type associated with the medical device programmer. However, it is well known and common to have printed information on a programmer, such as the cell-phone or PDA described by Haller. Usually this information includes the name of the manufacturer and model number as taught by Lin (see Figure 4). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to customize the faceplate by printing information identifying the type of programmer associated with the medical device because it would serve to differentiate between PDA's since they are being used more and more for various medical applications.

9. Regarding Claims 2 and 3, Haller does not disclose printing personalization information to identify a patient or a clinic. However, it is well known and common to put that kind of information on a device for easy identification, especially at a hospital or clinic since there are several patients with different medical needs. Just as biological samples, medical charts, and medications are already labeled with this information, it would be obvious to one of ordinary skill in the art at the time of the invention to label the programmer as well while it is being used for a specific patient. Furthermore, printing this information on the faceplate disclosed by Haller would have been obvious to one of ordinary skill in the art since the faceplate is removable and the actual programmer could be reprogrammed and reused for another patient, thereby eliminating the cost of having to make a new PDA each time.

10. Regarding Claims 4 and 5, Haller does not explicitly disclose that the plate member is printed with graphic or textual information. The examiner takes Official Notice that using graphics and text is typical in the printing art. In fact, the PDA in Figure 4 of Lin's article has the HP icon printed as well as some text on the bottom right hand side identifying the PDA as a pocket PC. Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to customize Haller's faceplate using pictures and words because this method of conveying the identifying information allows anyone to easily look at the programmer and know whose it is and what it does without having to open up the program.

11. Regarding Claim 6, Haller discloses that the plate member is molded to define one or more apertures to accommodate buttons extending outward from the programmer (see element 110, Figure 6A and col. 21, lines 46-50). The examiner considers that the buttons protruding from underneath the faceplate require the faceplate to have apertures in those locations otherwise the buttons would be covered.

12. Regarding Claim 8, Haller does not disclose that the software loading port is a JTAG port. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use some type of software loading port. The applicants do not give criticality to the use of a JTAG port over any other type. JTAG ports are the IEEE 1149.1 standard for test access ports, which use boundary scanning to test printed circuit boards. Thus, choosing the IEEE standard would have been an obvious design choice by one looking to implement a software loading port that is readily accepted in the electrical art.

13. Regarding Claims 9 and 10, Haller discloses that the plate member is selected from one of a plurality of plate members having different configurations based on a match between the configuration of the plate member and a type of medical device programmer being assembled (see col. 31, lines 8-13). The examiner considers that removing the original faceplate and replacing it with a custom faceplate automatically requires that the custom faceplate fit the programmer. In other words, the custom plate for a rectangular programmer with ten buttons and a large display must be a rectangle large enough to fit right over the programmer, have ten apertures in the appropriate locations, and have a large transparent area for the display. If the size, shape, and number of apertures is any different, the programmer will not be covered, held in place, or reveal its buttons to allow for programming. The word custom means 'made according to the specifications' and a custom faceplate would be one that is made according to the programmer it will be covering. Furthermore, the custom plate for a neurostimulator would necessarily have the graphic of something signifying neurostimulation as opposed to a heart icon, which would be more appropriate for a heart-stimulating device. It is simply a matter of design choice to have different plate members to choose from or to make the plate according to the configuration of the programmer. It would have been obvious to one of ordinary skill in the art at the time of the invention to have different faceplates ready to choose from so as to avoid having to wait for the faceplate to be made once the programmer configuration is known.

14. Regarding Claim 11, Haller discloses an infrared interface to receive changes to software executed by a processor within the programmer during an infrared

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communication session (see col. 7, lines 23-25; col. 22, lines 49-53; col. 42, lines 58-63). The mobile telephone is equivalent to the PDA according to Haller (see col. 21, lines 24-32).

15. Regarding Claim 13, Haller discloses that the display is a liquid crystal display (see col. 31, lines 6-8).

16. Regarding Claims 14 and 15, Haller discloses a first circuit board that includes telemetry circuitry (telemetry module 101); and a second circuit board that includes the display, display circuitry (see display/user interface 108, Figure 7). A module is a self-contained assembly of electronic components and circuitry (*The American Heritage® Dictionary of the English Language, Fourth Edition*). Thus, it can be said that the telemetry module is its own circuit board containing telemetry circuitry. Furthermore, Haller does not disclose any direct connection between the display and the telemetry module, indicating that they are not on the same circuit board. Although Haller does not disclose that the two circuit boards are enclosed within the first and second housing members of the programmer, Haller does disclose an embodiment wherein the communication module 100, which encloses these circuit boards, may be attached to the housing of the programmer 110 (see Figure 6B). Consequently, the circuit boards are a part of the programmer albeit indirectly. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the communication module into the PDA-type programmer, since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70).

17. Regarding Claim 16, Haller discloses control circuitry to drive the telemetry and display circuitry (see microprocessor 104, Figure 7). As for the control circuitry, a direct link between microprocessor 104 and telemetry module 101 shows that the microprocessor can control the first circuit board, which contains the telemetry circuitry. Similarly, the direct link between microprocessor 104 and display/user interface 108 shows that the microprocessor can control the second circuit board, which contains the display and display circuitry (see Figure 7). Haller does not explicitly disclose that the control circuitry is on the second circuit boards. However, display/user 108 is an interface and not a module; thereby, it is capable of sharing its circuit board with the microprocessor by definition of an interface (*computer circuit consisting of the hardware and associated circuitry that links one device with another; WordNet ® 2.0*).

18. Regarding Claim 17, Haller discloses that the first circuit board includes an internal antenna (see col. 24, lines 54-60). Since telemetry module 101 is on the first circuit board and the internal antenna is in the telemetry module, the internal antenna is also on the first circuit board.

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al. (US Patent 6,804,558) and Lin et al. in view of Duncan et al. (US Pub. 2003/0139782).

20. Regarding Claim 7, Haller discloses the transmission of software to the programmer (see col. 42, lines 52-64). However, Haller does not elaborate on the aperture for access to the software. Duncan discloses an aperture on the programmer for uploading software (see par. 50). Although Duncan does not specify the exact

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location of the aperture, it would have been obvious to one of ordinary skill in the art at the time of the invention to make an aperture somewhere on the housing for access to the software loading port. The applicant does not appear to disclose any criticality in the placement of the aperture on the second housing over any other location. Considering that the second housing will already be molded with holes to accommodate the buttons, it would have been an obvious design choice to place the aperture for the software port on the second housing as well so as to reduce the number of manufacturing steps involved in producing the housing.

21. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al. (US Patent 6,804,558) and Lin et al. in view of Stroebe et al. (US Patent 6,754,527).

22. Regarding Claim 12, Haller discloses power control circuitry (see power management module 106, Figure 7). Haller does not disclose that the power control circuitry reduces input voltage to a predetermined level to minimize noise levels within the programmer. However, it is common and well known to reduce input voltage to certain circuitry so the telemetry circuit can function with minimal noise from electrical interference. Stroebe is cited for periodically decreasing input voltage to minimize noise levels within the programmer (see col. 2, lines 38-48). Thus, it would have been an obvious choice to one of ordinary skill in the art to incorporate such a method of noise reduction because it enhances telemetric communication.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natasha N. Patel whose telephone number is 571-272-5818. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NNP
3/30/06


Robert E. Pezzuto
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